

Exhibit B

Link Budgets and Coverage Maps

	Rx E/S Longitude	-77.2 W	EARTH	E/S EIRP Req'd twds S/C	35.1 dBW
	Rx E/S Elev Angle	29.1 deg	STATION	(Note: req'd to achieve link margin)	
ISOLATION	XPOL	S/C Isolation	HPA	Tx Pointing Losses	0.3 dB
		Tx E/S Isolation		Max Clear Sky EIRP towards S/C	38.7 dBW
	DATA	Rx E/S Isolation		RF Head Output BO (CI Sky)	0.0 dB
LOSSES	MISC	Uplink Free Sp Loss			
		Dnlnk Free Sp Loss		Uplink Pwr Dens into Antenna	-14.1 dBW/4kHz
		Uplink Atmos Attn		PSD Limit for compliant antenna	-14.0 dBW/4kHz
		Dnlink Atmos Attn		PSD Limit adjusted for sidelobes	-14.0 dBW/4kHz

22-Aug-13			512ksps R1/2 HN INROUTE LINK BUDGET				
03:19 PM			Satellite: SatMex8 NAFTA				
			0.51m Remote in HELENA		7.6m hub in Germantown, MD		
			S U M M A R Y				
BASELINE PARAMETERS			Value	Unit	% Avail S/C Power Req'd/Crr		0.17 %
					% Xponder Bandwidth Req'd/Crr		4.00 %
					Clear Sky Link Margin		1.4 dB
					Power Equivalent Bandwidth		0.06 MHz
					Contract EIRP at reference contour		19.8 dBw
CARRIER	CI Sky Req'd Ebi/No	2.5	dB	LINK PERFORMANCE		CI Sky	Up Fade Dn Fade Unit
DATA	No of bits/symbol	2.0	Bits				
					Satellite SFD	-86.2	-86.2 -86.2 dBW/m2
					Agg Input B.O.	10.0	10.0 10.0 dB
					Input Backoff/Crr	37.9	38.9 37.9 dB
					Crr Flux Density	-124.1	-125.1 -124.1 dBW/m2
					Gain of a Sq meter	44.5	44.5 44.5 dBi
					UPLINK Uplink Path Losses	207.4	208.4 207.4 dB
					BUDGET Carrier Up EIRP	38.8	38.8 38.8 dBW
					Satellite G/T	2.0	2.0 2.0 dB/K
					C/N Uplink	1.9	0.9 1.9 dB
					Satellite	SatMex8 NAFTA	
					Location	-116.8	WL
					Hub EIRP Contour	51.0	dBW
					Remote G/T Contour	2.0	dB/K
					Attn Setting	10.0	dB
SATELLITE	Xponder Gain	187.7	dB				
DATA	SFD	-86.2	dBW/m2				
					Saturation EIRP	51.0	51.0 51.0 dBW
					Agg Output B.O.	4.0	4.0 4.0 dB
					Output Backoff/Crr	31.9	32.9 31.9 dB
					Carrier Dn EIRP	19.1	18.1 19.1 dBW
					Dnlink Path Losses	205.9	205.9 210.7 dB
					BUDGET Rx Pointing Losses	0.4	0.4 0.4 dB
					CI Sky E/S G/T	35.1	35.1 35.1 dB/K
					Degradation in G/T	0.0	0.0 4.1 dB
					C/N Downlink	16.5	15.5 7.7 dB
					C/N Uplink	1.9	0.9 1.9 dB
					C/N Downlink	16.5	15.5 7.7 dB
					C/I Intermod (S/C)	16.0	16.0 16.0 dB
					C/I Uplink Adj Sat	11.0	11.0 11.0 dB
					C/I Downlink Adj Sat	23.7	23.7 23.7 dB
					C/I Xpol	16.2	16.2 11.6 dB
					C/I Adjacent Carrier	17.0	17.0 17.0 dB
					C/(Nu,d)	1.8	0.8 0.9 dB
					C/(Nu,d,ims/c)	1.6	0.6 0.8 dB
					C/(Nu,d,im,i)Total	0.9	0.0 -0.1 dB
					LINK MARGIN	1.4	0.5 0.5 dB
					Symbol Rate	512	512 512 ksps
					FEC Code Rate	1/2	1/2 1/2
					Minimum Ebi/No	2.5	2.5 2.5 dB
					Minimum Req'd Ebt/No	-0.5	-0.5 -0.5 dB
					10*log(Rbt/Noise BW)	0.0	0.0 0.0 dB
					Minimum Req'd C/N	-0.5	-0.5 -0.5 dB
					RF Head Max Output Power		25.0 Watts
					Misc Feed Losses etc		0.0
					Tx E/S Location	HELENA	
					Tx E/S Latitude	46.6	N
					Tx E/S Longitude	-112.0	W
					Tx E/S Elev Angle	36.2	deg
					Rx E/S Location	Germantown, MD	
					Rx E/S Latitude	39.2	N

	Rx E/S Longitude	-77.2 W	EARTH	E/S EIRP Req'd twds S/C	38.5 dBW
	Rx E/S Elev Angle	29.1 deg	STATION	(Note: req'd to achieve link margin)	
ISOLATION	XPOL	S/C Isolation	HPA	Tx Pointing Losses	0.3 dB
		Tx E/S Isolation		Max Clear Sky EIRP towards S/C	38.8 dBW
	DATA	Rx E/S Isolation		RF Head Output BO (CI Sky)	0.0 dB
LOSSES	MISC	Uplink Free Sp Loss			
		Dnlnk Free Sp Loss		Uplink Pwr Dens into Antenna	-14.0 dBW/4kHz
		Uplink Atmos Attn		PSD Limit for compliant antenna	-14.0 dBW/4kHz
		Dnlink Atmos Attn			

8/22/2013

HughesNet LINK BUDGET

3:23 PM

Satellite: SatMex8 NAFTA

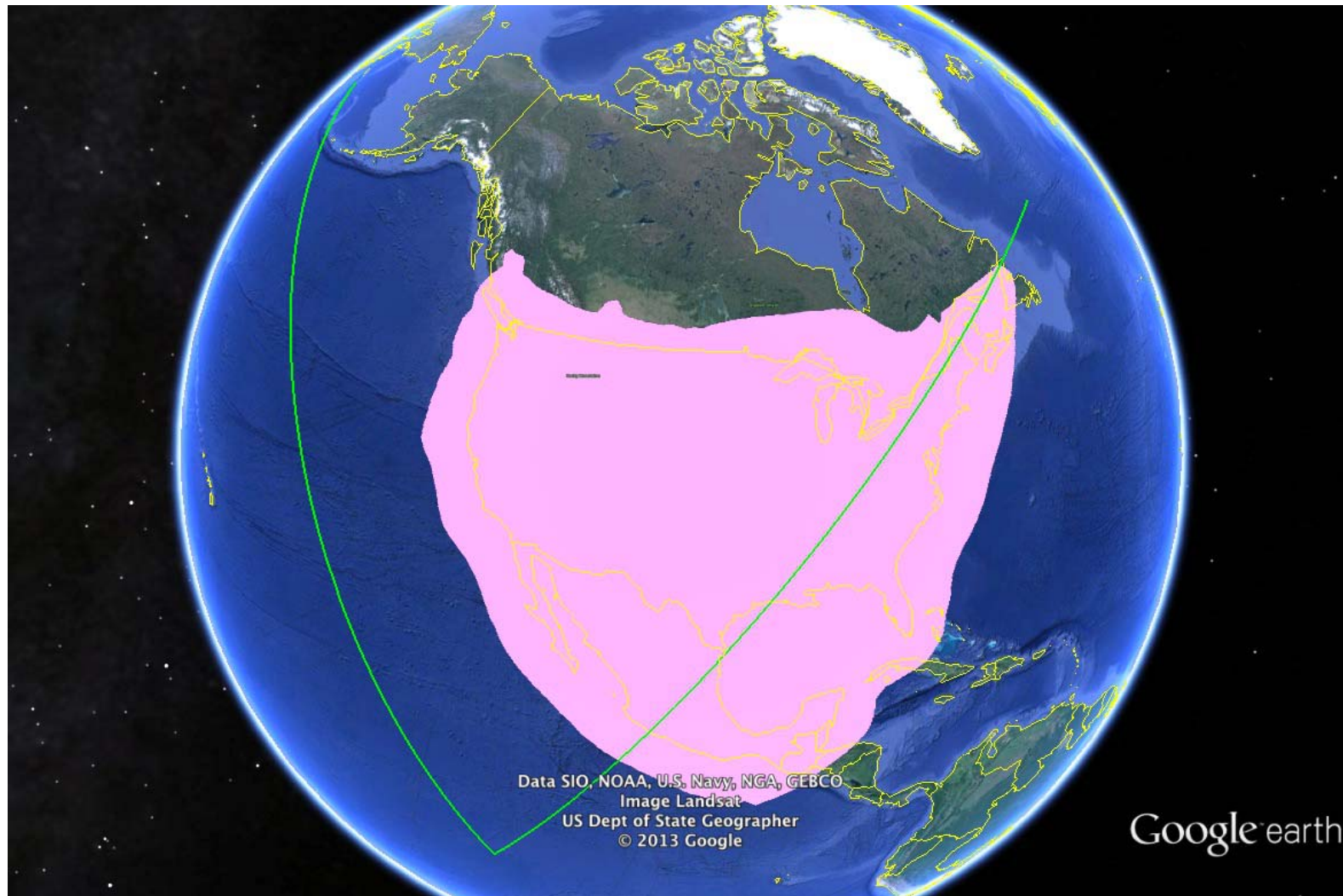
0.51 m Remote Located in HELENA

Crr EIRP Density = 12.7 dBW/4 KHz

BASELINE PARAMETERS			Value	Unit	S U M M A R Y								
CARRIER		Carrier Info Rate	49640	Kbps	% Avail S/C Power Req'd/Crr	100.0	%						
		Net FEC Code Rate	0.833		% Xponder Bandwidth Req'd/Crr	100.0	%						
		Transmit Symbol Rate	30000	Ksps	Clear Sky Link Margin	1.0	dB						
					Power Equivalent Bandwidth	36.0	MHz						
					EIRP at 51.7 dBW reference contour	51.2	dBw						
	CI Sky Req'd Es/No	5.4	dB	LINK PERFORMANCE						CI Sky	Up Fade	Dn Fade	Unit
	No of bits/symbol	2.0	Bits	Satellite SFD	-94.2	-94.2	-94.2	dBW/m2					
	Demod BT Product	1.00		Agg Input B.O.	3.0	3.0	3.0	dB					
SATELLITE		Crr Noise Bandwidth	30000	KHz	Input Backoff/Crr	3.0	3.0	3.0	dB				
		Carrier Spacing	36000	KHz	Crr Flux Density	-97.2	-97.2	-97.2	dBW/m2				
	Satellite	SatMex8 NAFTA		UPLINK	Gain of a Sq meter	44.5	44.5	44.5	dBi				
	Location	-116.8	WL	BUDGET	Uplink Path Losses	208.0	215.7	208.0	dB				
	EIRP Contour at Remote	49.0	dBW	Carrier Up EIRP	66.2	74.0	66.2	dBW					
	G/T Contour at Hub	5.0	dB/K	Satellite G/T	5.0	5.0	5.0	dB/K					
	Attn Setting	5.0	dB	C/N Uplink	17.1	17.1	17.1	dB					
	Xponder Gain	190.2	dB	EIRP Contour	49.0	49.0	49.0	dBW					
DATA	SFD	-94.2	dBW/m2	Agg Output B.O.	0.5	0.5	0.5	dB					
	Xponder Bandwidth	36.0	MHz	Output Backoff/Crr	0.5	0.5	0.5	dB					
	Agg Input BO	3.0	dB	Carrier Dn EIRP	48.5	48.5	48.5	dBW					
	Agg Output BO	0.5	dB	Dnlink Path Losses	205.4	205.4	205.7	dB					
	Uplink Frequency	14.250	GHz	BUDGET	Rx Pointing Losses	0.2	0.2	0.2	dB				
	Dnlink Frequency	11.450	GHz	CI Sky E/S G/T	11.0	11.0	11.0	dB/K					
				Degradation in G/T	0.0	0.0	0.7	dB					
				C/N Downlink	7.7	7.7	6.8	dB					
GROUND SEGMENT	Tx Antenna Dia	7.6	meters	C/N Uplink	17.1	17.1	17.1	dB					
	HPA Max Output Pwr	250.0	Watts	C/N Downlink	7.7	7.7	6.8	dB					
	Waveguide Losses	2.0	dB	C/I Intermod (S/C)	99.0	99.0	99.0	dB					
	Tx Antenna Gain	59.3	dBi	C/I Uplink Adj Sat	27.5	27.5	27.5	dB					
	Tx Pointing Losses	0.6	dB	C/I Dnlink Adj Sat	15.7	15.7	15.7	dB					
	Max EIRP Toward S/C	80.7	dB	C/I Xpol	18.4	15.4	18.4	dB					
				C/I Intermod (E/S)	33.5	18.0	33.5	dB					
				C/(Nu,d)	7.3	7.3	6.4	dB					
				C/(Nu,d,ims/c)	7.3	7.3	6.4	dB					
				C/(Nu,d,im,i)Total	6.4	5.8	5.7	dB					
				LINK MARGIN	1.0	0.4	0.3	dB					
				Modulation	QPSK	QPSK	QPSK						
				FEC Rate	5/6	5/6	5/6						
				Minimum Req'd Ebi/No	3.2	3.2	3.2	dB					
SITE	Uplink Rain Attn	7.7	dB	MODEM	10*log(Rbt/Noise BW)	3.0	3.0	3.0	dB				
	Dnlink Rain Attn	0.2	dB		Minimum Req'd C/N	5.4	5.4	5.4	dB				
	Up Fade Pwr Cntrl	7.7	dB		E/S EIRP/Crr Req'd (CI Sky)	66.2	dBW						
	Target Link Availability E-E	98.95	%		Tx Gain - Pointing Loss	58.7	dB						
	GEOGRAPHIC DATA	Tx E/S Location	Germantown, MD	EARTH STATION	Waveguide Losses	2.0	dB						
		Tx E/S Latitude	39.2	N	Tx Power Req'd/Cxr (clear sky)	9.6	dBW						
		Tx E/S Longitude	-77.2	W									
		Tx E/S Elev Angle	29	deg									
GEOGRAPHIC DATA	Rx E/S Location	HELENA											
	Rx E/S Latitude	46.6	N										

	Rx E/S Longitude	-112.0 W	HPA	9.0 watts
	Rx E/S Elev Angle	36.2 deg		
	XPOL S/C Isolation	36.0 dB	Uplink Power Control	7.7 dB
	ISOLATION Tx E/S Isolation	35.0 dB	TX Power Req'd/Cxr (full UPC)	17.3 dBW
	DATA Rx E/S Isolation	20.0 dB		53.7 watts
	Uplink Free Sp Loss	207.3 dB	Dnlink EIRP Dens @ Beam Peak (51.7 dBW)	12.7 dBW/4KHz
	MISC Dnlink Free Sp Loss	205.2 dB		
	LOSSES Uplink Atmos Attn	0.7 dB		
	Dnlink Atmos Attn	0.2 dB		

Satmex 8 Coverage With Skew line at ± 35 degrees



13-Sep-13		256ksps R1/2 HN INROUTE LINK BUDGET									
10:56 AM		Satellite: T14R K32U									
		0.51m Remote in San Juan		7.6m hub in Germantown, MD							
BASELINE PARAMETERS				Value	Unit	S U M M A R Y					
						% Avail S/C Power Req'd/Crr	0.31 %				
						% Xponder Bandwidth Req'd/Crr	4.00 %				
						Clear Sky Link Margin	4.4 dB				
						Power Equivalent Bandwidth	0.11 MHz				
						Contract EIRP at reference contour	19.2 dBw				
CARRIER	CI Sky Req'd Ebi/No		2.1	dB	LINK PERFORMANCE			CI Sky	Up Fade	Dn Fade	Unit
DATA	No of bits/symbol		2.0	Bits							
						Satellite SFD	-90.0	-90.0	-90.0	dBW/m2	
						Agg Input B.O.	8.7	8.7	8.7	dB	
						Input Backoff/Crr	33.8	34.8	33.8	dB	
						Crr Flux Density	-123.8	-124.8	-123.8	dBW/m2	
						Gain of a Sq meter	44.4	44.4	44.4	dBi	
						Uplink Path Losses	206.9	207.9	206.9	dB	
						Carrier Up EIRP	38.7	38.7	38.7	dBW	
						Satellite G/T	2.0	2.0	2.0	dB/K	
						C/N Uplink	2.2	1.2	2.2	dB	
						Saturation EIRP	49.0	49.0	49.0	dBW	
						Agg Output B.O.	6.7	6.7	6.7	dB	
						Output Backoff/Crr	31.8	32.8	31.8	dB	
						Carrier Dn EIRP	17.2	16.2	17.2	dBW	
						Dnlink Path Losses	205.7	205.7	209.8	dB	
						Rx Pointing Losses	0.4	0.4	0.4	dB	
						CI Sky E/S G/T	37.7	37.7	37.7	dB/K	
						Degradation in G/T	0.0	0.0	4.9	dB	
						C/N Downlink	17.2	16.2	8.2	dB	
						C/N Uplink	2.2	1.2	2.2	dB	
						C/N Downlink	17.2	16.2	8.2	dB	
						C/I Intermod (S/C)	8.1	8.1	8.1	dB	
						C/I Uplink Adj Sat	11.5	11.5	11.5	dB	
						C/I Downlink Adj Sat	25.3	25.3	25.3	dB	
						C/I Xpol	15.5	15.5	19.3	dB	
						C/I Adjacent Carrier	17.0	17.0	17.0	dB	
						C/(Nu,d)	2.1	1.1	1.3	dB	
						C/(Nu,d,ims/c)	1.1	0.3	0.4	dB	
						C/(Nu,d,im,i)Total	0.5	-0.2	0.0	dB	
						LINK MARGIN	4.4	3.7	3.9	dB	
						Symbol Rate	256	256	256	ksps	
						FEC Code Rate	1/2	1/2	1/2		
						Minimum Ebi/No	2.1	2.1	2.1	dB	
						Minimum Req'd Ebt/No	-0.9	-0.9	-0.9	dB	
						10*log(Rbt/Noise BW)	-3.0	-3.0	-3.0	dB	
						Minimum Req'd C/N	-3.9	-3.9	-3.9	dB	
						RF Head Max Output Power	25.0	Watts			
						Misc Feed Losses etc	0.0				

Rx E/S Longitude			-77.2 W	EARTH STATION	E/S EIRP Req'd twds S/C	35.3 dBW
Rx E/S Elev Angle			42.3 deg		(Note: req'd to achieve link margin)	
ISOLATION	XPOL	S/C Isolation	36.0 dB	HPA	Tx Pointing Losses	0.3 dB
		Tx E/S Isolation	35.0 dB		Max Clear Sky EIRP towards S/C	38.7 dBW
	DATA	Rx E/S Isolation	35.0 dB			
					RF Head Output BO (Cl Sky)	3.9 dB
MISC LOSSES	Uplink Free Sp Loss		206.6 dB		Uplink Pwr Dens into Antenna	-14.0 dBW/4kHz
	Dnlnk Free Sp Loss		205.4 dB			
	Uplink Atmos Attn		0.4 dB			
	Dnlnk Atmos Attn		0.4 dB			

Rx E/S Longitude			-77.2	W	EARTH STATION	E/S EIRP Req'd twds S/C	38.1	dBW
Rx E/S Elev Angle			42.3	deg		(Note: req'd to achieve link margin)		
ISOLATION	XPOL	S/C Isolation	36.0	dB	HPA	Tx Pointing Losses	0.3	dB
		Tx E/S Isolation	35.0	dB		Max Clear Sky EIRP towards S/C	38.7	dBW
	DATA	Rx E/S Isolation	35.0	dB		RF Head Output BO (Cl Sky)	3.9	dB
MISC LOSSES	Uplink Free Sp Loss		206.6	dB		Uplink Pwr Dens into Antenna	-14.0	dBW/4kHz
	Dnlnk Free Sp Loss		205.4	dB				
	Uplink Atmos Attn		0.4	dB				
	Dnlnk Atmos Attn		0.4	dB				

9/13/2013		HughesNet LINK BUDGET					
11:15 AM		Satellite:		T14R K32U			
		0.51 m Remote Located in		San Juan			
		Crr EIRP Density =		8.0 dBW/4 KHz			
BASELINE PARAMETERS		Value	Unit	S U M M A R Y			
CARRIER	Carrier Info Rate	4944	Kbps	% Avail S/C Power Req'd/Crr		32.3 %	
	Net FEC Code Rate	0.500		% Xponder Bandwidth Req'd/Crr		18.8 %	
	Transmit Symbol Rate	5000	Ksps	Clear Sky Link Margin		2.0 dB	
	CI Sky Req'd Es/No	1.2	dB	Power Equivalent Bandwidth		11.6 MHz	
	No of bits/symbol	2.0	Bits	EIRP at 51.0 dBW reference contour		39.4 dBW	
	Demod BT Product	1.00		LINK PERFORMANCE			
	Crr Noise Bandwidth	5000	KHz	CI Sky	Up Fade	Dn Fade	Unit
SATELLITE	Carrier Spacing	6750	KHz	Satellite SFD	-92.0	-92.0	-92.0 dBW/m2
	Satellite	T14R K32U		Agg Input B.O.	8.7	8.7	8.7 dB
	Location	-63.0 WL		Input Backoff/Crr	13.6	13.6	13.6 dB
	EIRP Contour at Remote	49.0 dBW		Crr Flux Density	-105.6	-105.6	-105.6 dBW/m2
	G/T Contour at Hub	4.0 dB/K		UPLINK Gain of a Sq meter	44.4	44.4	44.4 dBi
	Attn Setting	16.0 dB		BUDGET Uplink Path Losses	207.4	213.5	207.4 dB
	Xponder Gain	187.4 dB		Carrier Up EIRP	57.3	63.5	57.3 dBW
GROUND SEGMENT	SFD	-92.0 dBW/m2		Satellite G/T	4.0	4.0	4.0 dB/K
	Xponder Bandwidth	36.0 MHz		C/N Uplink	15.6	15.6	15.6 dB
	Agg Input BO	8.7 dB		EIRP Contour	49.0	49.0	49.0 dBW
	Agg Output BO	6.7 dB		Agg Output B.O.	6.7	6.7	6.7 dB
	Uplink Frequency	14.060 GHz		Output Backoff/Crr	11.6	11.6	11.6 dB
	Dnlink Frequency	11.760 GHz		Carrier Dn EIRP	36.8	36.8	36.8 dBW
	Tx Antenna Dia	7.6 meters		Dnlink Path Losses	205.3	205.3	205.9 dB
RAIN MARGINS	HPA Max Output Pwr	250.0 Watts		BUDGET Rx Pointing Losses	0.2	0.2	0.2 dB
	Waveguide Losses	6.0 dB		CI Sky E/S G/T	11.3	11.3	11.3 dB/K
	Tx Antenna Gain	59.2 dBi		Degradation in G/T	0.0	0.0	1.5 dB
	Tx Pointing Losses	0.6 dB		C/N Downlink	4.2	4.2	2.0 dB
	Max EIRP Toward S/C	76.6 dB		C/N Uplink	15.6	15.6	15.6 dB
	Rx Antenna Dia	0.51 meters		C/N Downlink	4.2	4.2	2.0 dB
	Rx Antenna Gain	31.0 dBi		C/I Intermod (S/C)	20.8	20.8	20.8 dB
GEOGRAPHIC DATA	Rx Pointing Losses	0.2 dB		C/I Uplink Adj Sat	24.0	24.0	24.0 dB
	Pre LNA Losses	0.3 dB		C/I Dnlink Adj Sat	14.0	14.0	14.0 dB
	LNA Noise Temp	43 K		C/I Xpol	18.4	17.8	18.4 dB
	Ant,etc Temp	28 K		C/I Intermod (E/S)	30.3	18.0	30.3 dB
	CI Sky Noise Temp	71 K		C/(Nu,d)	3.9	3.9	1.8 dB
	Rx Clr Sky G/T	11.3 dB/K		C/(Nu,d,ims/c)	3.8	3.8	1.8 dB
	Uplink Rain Attn	6.2 dB		C/(Nu,d,im,i)Total	3.2	3.1	1.4 dB
SITE DATA	Dnlink Rain Attn	0.6 dB		LINK MARGIN	2.0	1.9	0.2 dB
	Up Fade Pwr Cntrl	6.2 dB		Modulation	QPSK	QPSK	QPSK
	Target Link Availability E-E	98.95 %		FEC Rate	1/2	1/2	1/2
	Tx E/S Location	Germantown, MD		Minimum Req'd Ebi/No	1.2	1.2	1.2 dB
STATION	Tx E/S Latitude	39.2 N		10*log(Rbt/Noise BW)	3.0	3.0	3.0 dB
	Tx E/S Longitude	-77.2 W		Minimum Req'd C/N	1.2	1.2	1.2 dB
	Tx E/S Elev Angle	42 deg		E/S EIRP/Crr Req'd (CI Sky)	57.3 dBW		
	Rx E/S Location	San Juan		Tx Gain - Pointing Loss	58.6 dB		
STATION	Rx E/S Latitude	18.5 N		Waveguide Losses	6.0 dB		
				Tx Power Req'd/Cxr (clear sky)	4.8 dBW		

	Rx E/S Longitude	-66.1 W	HPA	3.0 watts
	Rx E/S Elev Angle	68.0 deg		
	XPOL S/C Isolation	36.0 dB	Uplink Power Control	6.2 dB
	ISOLATION Tx E/S Isolation	35.0 dB	TX Power Req'd/Cxr (full UPC)	10.9 dBW
	DATA Rx E/S Isolation	20.0 dB		12.4 watts
	Uplink Free Sp Loss	206.9 dB	Dnlink EIRP Dens @ Beam Peak (51.0 dBW)	8.0 dBW/4KHz
	MISC Dnlink Free Sp Loss	205.0 dB		
	LOSSES Uplink Atmos Attn	0.5 dB		
	Dnlink Atmos Attn	0.3 dB		

9/13/2013		HughesNet LINK BUDGET							
11:15 AM		Satellite:		T14R K32U					
		0.51 m Remote Located in		San Juan					
		Crr EIRP Density =		10.0 dBW/4 KHz					
BASELINE PARAMETERS		Value	Unit	S U M M A R Y					
CARRIER	Carrier Info Rate	7437	Kbps	% Avail S/C Power Req'd/Crr		51.1 %			
	Net FEC Code Rate	0.750		% Xponder Bandwidth Req'd/Crr		18.8 %			
	Transmit Symbol Rate	5000	Ksps	Clear Sky Link Margin		1.0 dB			
	CI Sky Req'd Es/No	4.2	dB	Power Equivalent Bandwidth		18.4 MHz			
				EIRP at 51.0 dBW reference contour		41.4 dBW			
				LINK PERFORMANCE					
				CI Sky	Up Fade	Dn Fade	Unit		
DATA	No of bits/symbol	2.0	Bits	Satellite SFD		-92.0	-92.0	-92.0	dBW/m2
	Demod BT Product	1.00		Agg Input B.O.		8.7	8.7	8.7	dB
	Crr Noise Bandwidth	5000	KHz	Input Backoff/Crr		11.6	11.6	11.6	dB
	Carrier Spacing	6750	KHz	Crr Flux Density		-103.6	-103.6	-103.6	dBW/m2
				UPLINK					
				Gain of a Sq meter		44.4	44.4	44.4	dBi
				BUDGET					
				Uplink Path Losses		207.4	213.5	207.4	dB
SATELLITE	Satellite	T14R K32U		Carrier Up EIRP		59.3	65.5	59.3	dBW
	Location	-63.0 WL		Satellite G/T		4.0	4.0	4.0	dB/K
	EIRP Contour at Remote	49.0 dBW							
	G/T Contour at Hub	4.0 dB/K							
	Attn Setting	16.0 dB							
	Xponder Gain	187.4 dB		C/N Uplink		17.6	17.6	17.6	dB
DATA	SFD	-92.0 dBW/m2		EIRP Contour		49.0	49.0	49.0	dBW
	Xponder Bandwidth	36.0 MHz		Agg Output B.O.		6.7	6.7	6.7	dB
	Agg Input BO	8.7 dB		Output Backoff/Crr		9.6	9.6	9.6	dB
	Agg Output BO	6.7 dB		Carrier Dn EIRP		38.8	38.8	38.8	dBW
	Uplink Frequency	14.060 GHz		Dnlink Path Losses		205.3	205.3	205.9	dB
	Dnlink Frequency	11.760 GHz		BUDGET					
				Rx Pointing Losses		0.2	0.2	0.2	dB
				CI Sky E/S G/T		11.3	11.3	11.3	dB/K
GROUND	Tx Antenna Dia	7.6 meters		Degradation in G/T		0.0	0.0	1.5	dB
	HPA Max Output Pwr	250.0 Watts							
	Waveguide Losses	2.0 dB							
	Tx Antenna Gain	59.2 dBi		C/N Downlink		6.2	6.2	4.0	dB
	Tx Pointing Losses	0.6 dB							
	Max EIRP Toward S/C	80.6 dB							
SEGMENT	Rx Antenna Dia	0.51 meters		C/N Uplink		17.6	17.6	17.6	dB
				C/N Downlink		6.2	6.2	4.0	dB
				C/I Intermod (S/C)		22.8	22.8	22.8	dB
				C/I Uplink Adj Sat		29.3	29.3	29.3	dB
				C/I Dnlink Adj Sat		17.2	17.2	17.2	dB
				C/I Xpol		18.4	17.8	18.4	dB
				C/I Intermod (E/S)		30.3	18.0	30.3	dB
DATA	Rx Antenna Gain	31.0 dBi		C/(Nu,d)		5.9	5.9	3.8	dB
	Rx Pointing Losses	0.2 dB		C/(Nu,d,ims/c)		5.8	5.8	3.8	dB
	Pre LNA Losses	0.3 dB		C/(Nu,d,im,i)Total		5.2	5.0	3.4	dB
	LNA Noise Temp	43 K		LINK MARGIN		1.0	0.8	0.1	dB
	Ant,etc Temp	28 K							
	CI Sky Noise Temp	71 K							
	Rx Clr Sky G/T	11.3 dB/K							
RAIN	Uplink Rain Attn	6.2 dB		Modulation		QPSK	QPSK	QPSK	
	Dnlink Rain Attn	0.6 dB		FEC Rate		3/4	3/4	2/3	
	Up Fade Pwr Cntrl	6.2 dB		Minimum Req'd Ebi/No		2.5	2.5	2.1	dB
	Target Link Availability E-E	98.95 %							
MARGINS									
SITE	Tx E/S Location	Germantown, MD		MODEM					
	Tx E/S Latitude	39.2 N		10*log(Rbt/Noise BW)		3.0	3.0	3.0	dB
	Tx E/S Longitude	-77.2 W		Minimum Req'd C/N		4.2	4.2	3.3	dB
GEOGRAPHIC	Tx E/S Elev Angle	42 deg							
DATA	Rx E/S Location	San Juan		EARTH					
	Rx E/S Latitude	18.5 N		Waveguide Losses		2.0	dB		
				STATION					
				Tx Power Req'd/Cxr (clear sky)		2.8	dBW		

	Rx E/S Longitude	-66.1 W	HPA	1.9 watts
	Rx E/S Elev Angle	68.0 deg		
ISOLATION	XPOL S/C Isolation	36.0 dB	Uplink Power Control	6.2 dB
	Tx E/S Isolation	35.0 dB	TX Power Req'd/Cxr (full UPC)	8.9 dBW
DATA	Rx E/S Isolation	20.0 dB		7.8 watts
	Uplink Free Sp Loss	206.9 dB	Dnlink EIRP Dens @ Beam Peak (51.0 dBW)	10.0 dBW/4KHz
MISC	Dnlink Free Sp Loss	205.0 dB		
LOSSES	Uplink Atmos Attn	0.5 dB		
	Dnlink Atmos Attn	0.3 dB		

Telesat Telstar 14R Total Coverage Area (Actual Use Will Be Over North Atlantic, Canada and Caribbean)

